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NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

PHOTOGRAPHIC INTERPRETATION REPORT

PART TIME AIR WARNING RADAR SYSTEM, USSR

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GROUP 1: EXCLUDED FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION

PART TIME AIR WARNING RADAR SYSTEM, USSR

ABSTRACT

1. Twenty-seven facilities which are a part of the PART TIME Air Warning Radar System in the USSR have been identified on KEYHOLE photography. Twenty of these facilities have ribbed radomes 23 meters (75 feet) in diameter and PART TIME radars, which are probably inside the radomes. Six of the remaining facilities have fixed data receiving antennas collocated with TALL KING radars. The seventh facility has the fixed data receiving antennas but no collocated TALL KING.

2. This report includes a location map and tabular listing of the 27 facilities and annotated photographs of selected facilities.

INTRODUCTION

3. Twenty-seven facilities which are a part of the PART TIME Air Warning Radar System in the USSR have been identified on KEYHOLE photography since 1964 (Figure 1 and Table 1). Twenty-one of these facilities are deployed along the northern and southern borders of the USSR, and the other six are deployed in the interior.

4. A typical PART TIME radar facility consists of a ribbed radome 23 meters (75 feet) in diameter, a PART TIME radar, which is probably inside the radome, and three horizontal fuel storage tanks (Figure 2).[1] The radar has never been observed on KEYHOLE photography. The associated radome is unusual in that it has six circular, unidentified objects on top. Other radomes 23 meters (75 feet) in diameter observed in the USSR on KEYHOLE photography do not have these objects.

5. The radar data acquired by the PART TIME radar is transmitted to a remote recipient which is probably collocated with TALL KING radars. The PART TIME radars deployed in the north transmit their data to cut parabolic data receiving antennas 10 meters (33 feet) in diameter, nicknamed RAG TIME, which are collocated with TALL KING radars (Figure 3). The PART TIME radars at Kapustin Yar and the two on the USSR-Mongolia border probably transmit their data to antennas 18 meters (60 feet) in diameter (Figure 4).

6. When the air warning radar facilities and the azimuths of the data receiving antennas are plotted on a map, a series of triangles is produced (Figure 1). Two PART TIME radar facilities and one TALL KING radar facility appear to form one triangle. This pattern suggests that in those areas of the interior and far eastern USSR where only one or two facilities could be identified, a second and/or third facility may exist which would complete the triangular pattern. However, the lack of current KEYHOLE photography covering these areas precludes identification of these facilities.

7. There are indications that the system may be undergoing some type of modification. Between May and October 1971 the RAG TIME antennas at Shoyna were removed, and in October 1971 the radome at Malaya Nes had been partially dismantled.

BASIC DESCRIPTION

8. The 27 facilities listed in Table 1 have been identified as components of the PART TIME Air Warning Radar System.

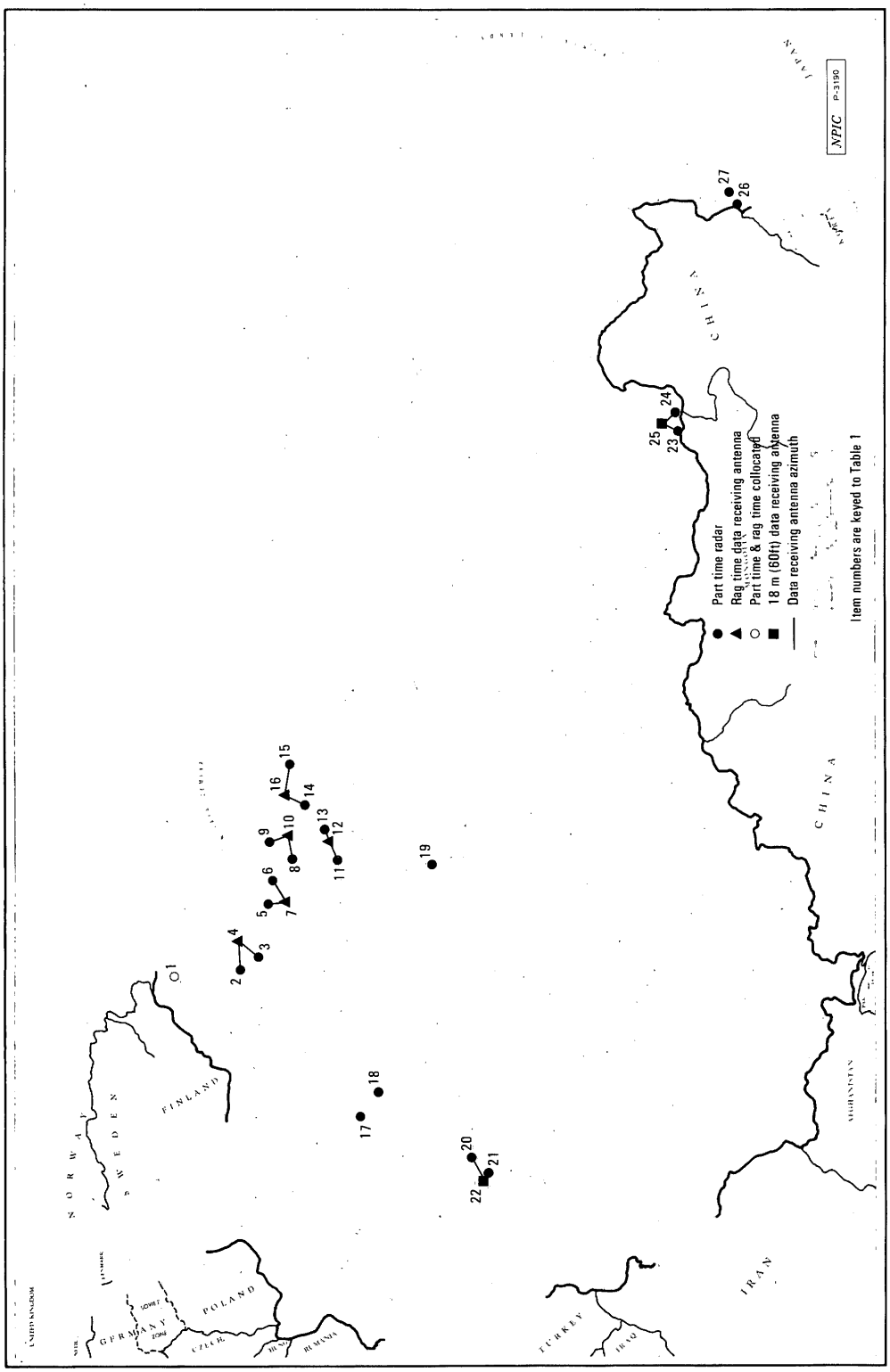

FIGURE 1. DEPLOYMENT OF THE PART TIME AIR WARNING RADAR SYSTEM, USSR

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TABLE 1. Facilities in the PART TIME Air Warning Radar System, USSR (Keyed to Figure 1)

Item	Name	Coordinates	Antennas	Azimuth	Remarks
1	Murmansk Tracking Facility	684930N 0330730E	1 PART TIME 1 TALL KING 1 SCORE BOARD 1 ROCK/STONE CAKE 2 RAG TIME	- - - -	No communications equipment or correspondents for the RAG TIME antennas were identified
2	Kiya Site B AW Radar Facility	670615N 0410710E	1 PART TIME 1 THIN SKIN 1 SQUAT EYE 1 FLAT FACE 1 BAR LOCK 2 SPOON REST 1 SIDE NET 2 FORK REST 2 pair TWIN DISH	- - - - - - - Undet [redacted]	No additional radar facilities were observed 25X1
3	Malaya Nes Tracking Facility	663600N 0444500E	1 PART TIME 1 SQUAT EYE 1 THIN SKIN 2 SPOON REST	- - - -	The PART TIME radome was partially dismantled in Oct 71. No communications equipment was observed.
4	Shoyna Troposcatter Station	675100N 0440930E	1 TALL KING 1 SCORE BOARD 1 SPOON REST 1 SIDE NET 2 RAG TIME 1 horizontal dipole 1 horizontal dipole	- - - - 170, 235 35/215 95/275	The RAG TIME data reception antennas were removed in Oct 71. This facility received data from Kiya and Malaya Nes.
5	Verkhniy Shar Tracking Facility	681900N 0505200E	1 PART TIME	-	No additional radars or communications equipment were observed
6	Khodovankha Tracking Facility	685630N 0534400E	1 PART TIME	-	No additional radars or communications equipment were observed
7	Naryan-Mar Troposcatter Facility	673900N 0530900E	1 TALL KING 1 SCORE BOARD 1 BAR LOCK 1 SPOON REST 2 BACK NET 3 SIDE NET 3 FORK REST 2 RAG TIME	- - - - - - Undet 310, 360	The data reception facility is collocated with Naryan-Mar AW Radar Facility TALL KING [redacted] 25X1 facility receives data from Verkhniy Shar and Khodovankha.
8	Amderma Site A	684755N 0575810E	1 PART TIME	-	No additional radars or communications equipment were observed
9	Amderma Site B	702640N 0590230E	1 PART TIME	-	No additional radars or communications equipment were observed
10	Amderma Troposcatter Facility	694450N 0614350E	1 TALL KING 1 SCORE BOARD 1 BAR LOCK 2 BACK NET 2 SPOON REST 3 SIDE NET 2 RAG TIME 1 rhombic 1 rhombic 1 horizontal dipole 1 horizontal dipole 1 horizontal dipole	- - - - - - [redacted] 50/230 70/250 20/200 45/225 70/250	The data reception facility is collocated with Amderma AW Radar Facility Tall King [redacted] Th 25X1 facility receives data from Amderma Site A and Amderma Site B. 25X1
11	Abez Tracking Facility	663224N 0614431E	1 PART TIME	-	No additional radars or communications equipment w 25X1 observed
12	Khalmer-Yu Afid AW Radar	675829N 0644341E	1 PART TIME	-	No additional radars or communications equipment were observed
13	Vorkuta Troposcatter A RADCOM Station	673200N 0640830E	1 TALL KING 1 SCORE BOARD 1 BAR LOCK 1 ROCK/STONE CAKE 1 R-400 2 FORK REST 2 horizontal dipoles 2 horizontal dipoles	- - - - Undet Undet 55/235 70/250	The data reception facility is collocated with Naryan-Mar AW Radar Facility TALL KING [redacted] 25X1 facility receives data from Abez and Khalmer-Yu.
14	Kharasavehy Site A AW Radar Facility	694442N 0665114E	1 PART TIME 1 ROCK/STONE CAKE 1 SQUAT EYE 1 horizontal dipole 1 horizontal dipole 1 horizontal dipole 2 horizontal dipoles	- - - 15/195 50/230 95/275 110/290	No additional radars or communications equipment w 25X1 observed
15	Tambey Tracking Facility	712900N 0714600E	1 PART TIME	-	No additional radars or communications equipment were observed
16	Mys Kharasavey Troposcatter Station	710620N 0664515E	1 TALL KING 1 SCORE BOARD 1 BAR LOCK 1 SIDE NET 3 FORK REST 2 RAG TIME	- - - - Undet [redacted]	The data reception facility is collocated with Mys Kharasavey AW Radar Facility TALL KING [redacted] 25X1 facility receives data from Kharasavehy and Tambey. 25X1
17	Vladimir AW Radar Facility TALL KING	561415N 0401430E	1 PART TIME 2 TALL KING 2 BACK NET 2 BAR LOCK 3 SIDE NET 1 THIN SKIN 2 FORK REST	- - - - - - Undet	No additional radar facilities or communications equipment were observed. No correspondent for the PART TIME radar could be identified.
18	Pravdinsk AW Radar Facility	563300N 0432200E	1 PART TIME 4 BACK NET 4 SIDE NET	- - -	No additional radars or communications equipment were observed. No correspondent for the PART TIME radar could be identified.
19	Urmannyy AW Radar Facility PART TIME	613800N 0674900E	1 PART TIME	-	No additional radars or communications equipment were observed. No correspondent for the PART TIME radar could be identified.
20	Kamyshin AW Radar Facility	500310N 0451600E	1 PART TIME 2 BACK NET 4 SIDE NET 2 R-400 1 pair TWIN DISH	- - - Undet 165	No additional radars or communications equipment were observed.
21	Kapustin Yar/Vladimirovka Missile Test Center (PART TIME Radar Facility)	484200N 0460000E	1 PART TIME	-	No additional radars or communications equipment were observed
22	Kapustin Yar/Vladimirovka Missile Test Center (PART TIME Data Reception Facility)	484200N 0460000E	2 antennas 18 meters (60 feet) in diameter	-	These antennas receive data from Kapustin Yar and Kamyshin
23	Buylesan AW Radar Facility PART TIME	501500N 1145300E	1 PART TIME 1 SQUAT EYE	- -	No additional radars or communications equipment were observed
24	Dauriya AW Radar Facility PART TIME	495500N 1165000E	1 PART TIME	-	No additional radars or communications equipment were observed
25	Khadabulak Data Receiving Facility PART TIME	504430N 1161330E	1 TALL KING 1 SCORE BOARD 1 SPOON REST 2 BACK NET 2 SIDE NET 1 pr TWIN DISH 2 FORK REST 2 FORK REST 2 FORK REST 2 antennas 18 meters (60 feet) in diameter	- - - - - 310 10/190 50/230 130/310 155, 245	The facility is collocated with Khadabulak AW Radar Facility TALL KING [redacted] The facili 25X1 receives data from Dauriya and Buylesan. 25X1
26	Slavyanka AW Radar Facility PART TIME	425050N 1312250E	1 PART TIME 1 SPOON REST 1 SQUAT EYE 1 THIN SKIN	- - - -	Construction for a possible second radome was observed. No communications equipment or correspondent for the PART TIME radar could be identified.
27	Ostrov Askold Prob AW Radar Facility	424630N 1322030E	1 PART TIME	-	No additional radars or communications equipment were observed. No correspondent for the PART TIME radar could be identified.

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- 3 -

Next 1 Page(s) In Document Denied

REFERENCES (cont)

MAPS OR CHARTS

ACIC. US Air Target Charts, Series 200, scale 1:200,000

DOCUMENTS

1. NPIC. Newly Identified Soviet Probable Air Warning Radar System, Apr 70 (TOP SECRET RUFF

RELATED DOCUMENTS

REQUIREMENT

NPIC/IEG/WGD/SSB Project 251310

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